GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

STARRED QUESTION NO:336
ANSWERED ON:07.12.2007
STUDY ON HIMALAYAN GLACIOLOGY
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government proposes to set up a specialized research centre at the national level for holistic studies on Himalayan glaciology and for monitoring all important glaciers to deal with snow melting;

(b) if so, the details thereof;

(c) the time by which such a centre is likely to be set up;

(d) whether the rate of shrinking of Gangotri glacier during the last three decades is more than the rate during the last decade; and

(e) if so, the details thereof alongwith the effects of shrinking of above glacier?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (KAPIL SIBAL)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT IN REPLY TO LOK SABHA STARRED QUESTION NO. 336 TO BE ANSWERED ON 7.12.2007 RAISED BY SHRI. IQBAL AHMED SARADGI AND SHRI KULDEEP BISHNOI

(a) to (e): The Department of Science and Technology had been mandated by the Committee of Secretaries to establish a National Institute for Research & Development on Himalayan Glaciers. Accordingly, the Department of Science & Technology has initiated the consultative process for preparing a detailed Project Report for establishing an Institute for `Snow, Ice and Glaciers Studies`.

The National Institute of Snow, Ice and Glacier Study (NISIGS), as it may be called, will be initiated as a cell at Wadia Institute of Himalayan Geology, Dehra Dun in the coming 2 months. Subsequently, a suitable location would be chosen for the establishement of the National Institute from where an integrated research activity on a network of selected glaciers could be co-ordinated in the three climatic zones of Himalaya namely, the zone under the influence of the westerlies (Jammu & Kashmir); SW monsoon (Himachal Pradesh and Uttarakhand); and both SW and NE monsoons (Sikkim-Arunachal region) for the better understanding of Himalayan glacier dynamics.

Commissioning of expert groups for the preparation of Road map, Detailed Project Report and EFC note have been initiated.

The Geological Survey of India has been carrying out studies on the recession of Gangotri Glacier since 1935. Between 1935 and 1996 the average recession rate of Gangotri Glacier was 18.80 m/year but during 1976 - 96 an increased recession rate of 28.25 had been observed. Further, studies carried out by Jawaharlal Nehru University and G.B. Pant Institute of Himalayan Environment & Development had recorded the recession rates of Gangotri Glacier as 17.15m/year between 1971 and 2004 and 12.10 m during 2004-05.

As regards the impact of shrinking of the Gangotri glacier there seems to be no immediate cause of major concern. Retreat or advance is a natural process for the glacier. The most important reason for understanding the health and dynamics of Himalayan Glaciers lies in the fact that they play a significant role in the control of the climate of the subcontinent and have a profound influence on the nature of agriculture and its productivity, hydro-power production and environmental changes that may have a direct bearing on the life and livelihood of the people living in the region.